

Determination of Public Land (Rangeland) Health for 65040 MALCOLM C HARRAL

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the Malcolm C. Harral allotment #65040 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered and Special Status Species standard. There are no public land riparian areas on this allotment, therefore this standard was not addressed.

/s/ T. R. KREAGER

Assistant Field Manager

09/09/2004

Date

Standards of Public Land Health

Evaluation of 65040 MALCOLM C HARRAL

Allotment

[03/13/2004]

The Roswell Field Office conducted rangeland health assessments at one study site within the Malcolm C Harral Allotment #65040. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
65040-NM24- C036	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the Malcolm C Harral allotment; 10 of these assessed soil/site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments along with quantitative information from two areas on the allotment were utilized to assess the rangeland health of the public land within the allotment. This allotment is a "C" category (custodial) because of the small amount of public land within the allotment.

The indicators rated in the majority of None to Slight to Slight to Moderate category, with the exception of bareground, annual production and invasive plants rating in the Moderate category. But none of these exhibit any real concern at the moment. Favorable precipitation events would further augment this site's potential. The low presence of grama grasses is evident however on this soil type tobosa and burrogras may dominate. However the reproductive capability of the perennial plants to reproduce was not limited. There was a generous amount of physical crusting which may be holding the soils in place until favorable climatic conditions return. This site is a Loamy SD-3 and exhibits some prickly pear (*Opuntia* spp.) encroachment but not to the level of limiting this site's potential.

Hydrology - Pasture NM24 - The rills, water flow patterns, pedestals and/or terracettes, bareground, gullies, wind scoured, blowouts, and or deposition areas, litter movement, soil surface resistance to erosion, soil surface loss or degradation, plant community composition and distribution relative to infiltration and runoff, compaction layer, litter amount, and physical/chemical/biological crusts indicators have rated as none to slight or

slight to moderate. Gypsum, dolomite, and silstone deposits of the Yates Formation outcrop in the area.

Wildlife - There is one large tract of public land within this very small grazing allotment. The highways and rights-of-way fencing to the north and west effectively limit pronghorn antelope movement off of the allotment. Herds are still able to move between allotments south and east of the highways. The only biotic factor of concern is annual production which is closely tied to the droughty conditions over the past several years.

It is the professional opinion of the Assessment Team. that the public land within the Malcolm C Harral allotment meets the Upland and Biotic standards. There are no Riparian issues present, therefore this standard was not addressed. See site notes and recommendations regarding this assessment.

Recommendations: Wildlife - If and/or when the opportunity arises, consider combining this allotment with 65057.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 65040-NM24-C036						
Legal Land Desc	SWSW 31 0100S 0260E Meridian 23	Acreage		287		
Ecosite	042CY007NM LOAMY SD-3	Photo Taken		Y		
Watershed	13060007010 GOPHER					
Observers	SPAIN/NAVARRO	Observation Date		03/17/2004		
County Soil Survey	NM644 CHAVES NORTH	Soil Var/Taxad				
Soil Map Unit	HMA	Soil Taxon Name		HOLLOMEX		
Texture Class	NM644 L	Soil Phase		HOLLOMEX-REEVES-MILNER		
Texture Modifier	NM644 LOAM,DRY					
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation				
NOAA Annual Precipitation	7.94	NOAA Growing Season Precipitation		4.91		
NOAA Avg Annual Precipitation	12.83	NOAA Avg Growing Season Precipitation		10.65		
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments :						
S H	Water Flow Patterns				X	
Comments :						
S H	Pedestals and/or Terracettes				X	

Comments :	in flow patterns					
S H	Bare Ground				X	
Comments :						
S H	Gullies					X
Comments :						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments :						
H	Litter Movement				X	
Comments :						
S H B	Soil Surface Resistance to Erosion				X	
Comments :						
S H B	Soil Surface Loss or Degradation				X	
Comments :						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments :	minor and due to drought conditions					
S H B	Compaction Layer					X
Comments :						
B	Functional/Structural Groups				X	
Comments :	Tobossa, ring muhly, burro-grass and gramma grass					
B	Plant Mortality/Decadence					X
Comments :						
H B	Litter Amount				X	

Comments :						
B	Annual Production			X		
Comments :						
B	Invasive Plants				X	
Comments :	Opuntia and some mesquite					
B	Reproductive Capability of Perennial Plants				X	
Comments :						
S	Physical/Chemical/Biological Crusts				X	
Comments :	Both physical and biological crust are present. Biological crust are scattered and is influenced by the gypsum					
B	Wildlife Habitat				X	
Comments :	A relatively flat, grassland habitat within a very small grazing allotment bounded on the north by Highway 370 and State Highway 409 to the west.					
B	Wildlife Populations				X	
Comments :	Primary species of concern is pronghorn antelope and a variety of non-game terrestrial species. Herds are able move between allotments in this area. The highway is an effective barrier to movement. Local herd movement somewhat limited to habitat south and east of the highways.					
B	Special Status Species Habitat					X
Comments :	None known to occur.					
B	Special Status Species Populations					X
Comments :	None known to occur.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard		Extrem	Moderat	Moderat	Slight to	None

Attribute		e	e to Extreme	e	Moderat e	to Slight
S	Soil	0	0	0	6	4
H	Hydrologic	0	0	0	8	3
B	Biotic	0	0	1	8	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	1	12

Site Notes: he gypsic soils of the HOLLLOMEX-REEVES-MILNER association greatly influence the vegetative community found on this site. Tobossa, burrograss and gyp grammas are dominant. Gyp Upland ecological site inclusions are scattered inclusions within this area. These inclusions are on the more shallow to very shallow soils.

65040 – Site NM24



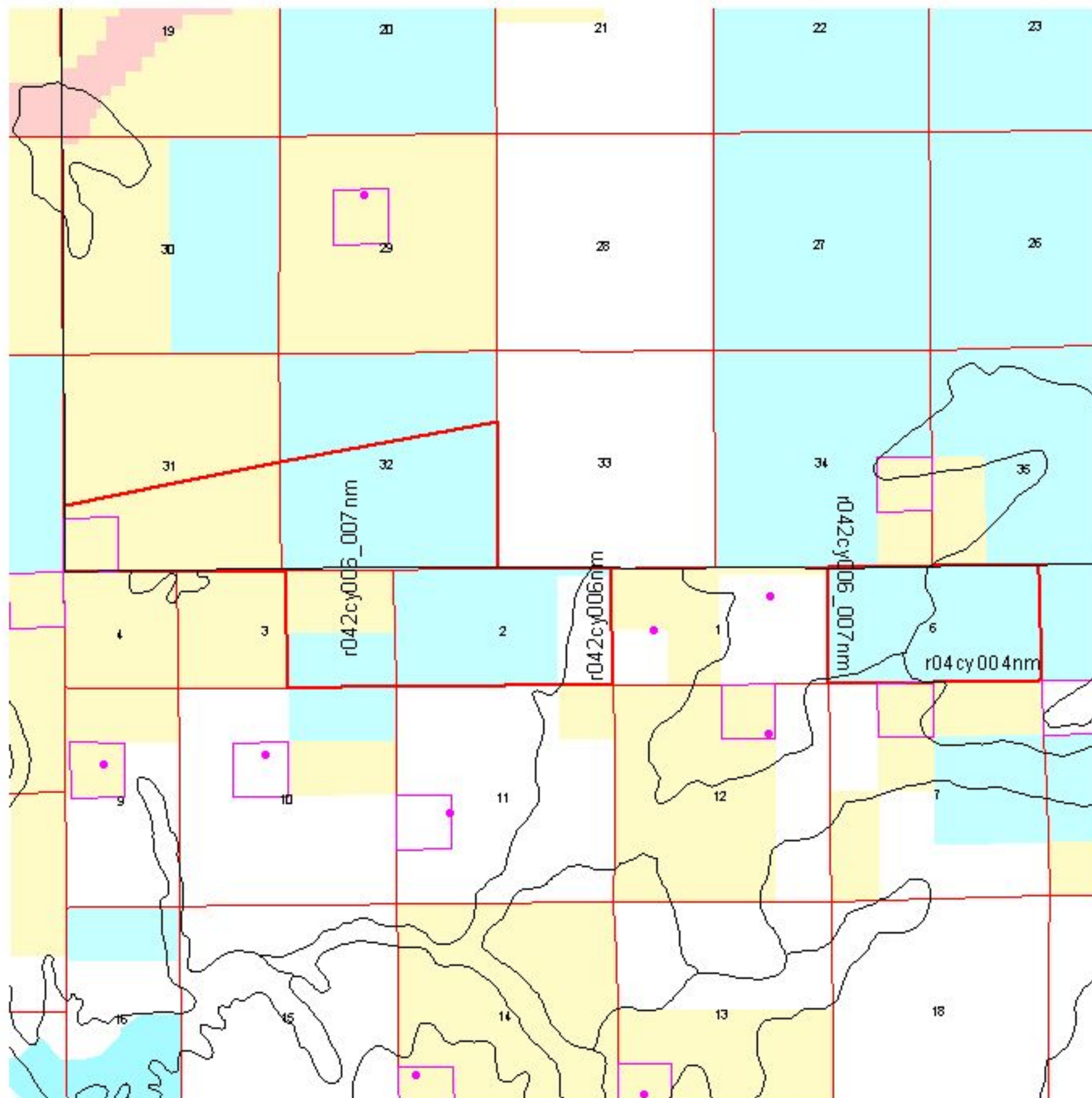


Rangeland Health Assessment Ecological Sites

Allotment 65040



T10S.R25E



0.6 0 0.6 Miles



Public



State



Study Plots



Private



Study Locations



Ecological Site Boundary



Allotment Boundary

Produced by the Roswell Field Office
GIS Intern on July 8, 2003.

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or for any other purpose. The data are provided for informational purposes only and are not intended for any other use. No warranty is made by BLM, BLM, or any other agency for any other use. No warranty is made by BLM, BLM, or any other agency for any other use.

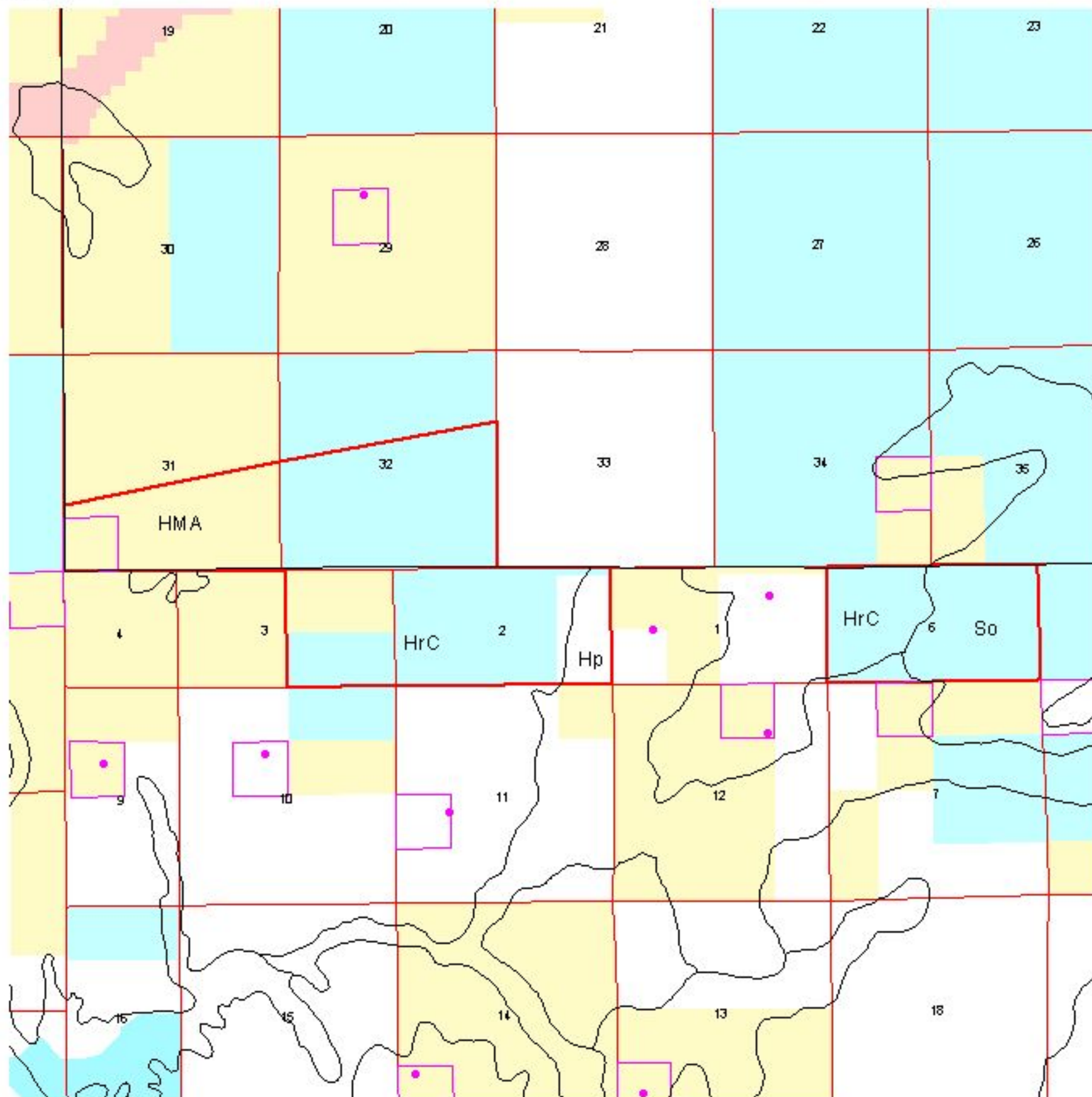


Rangeland Health Assessment Soil Mapping Units

Allotment 65040



T10S.R25E



T11S.R27E

0.6 0 0.6 Miles



Public



Study Plots



State



Private



Study Locations



Soil Mapping Units



Allotment Boundary

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